

EXHIBIT A

EMSEAL V. SCHUL ET AL., USDC-NH (CA 1:14-CV-00358-SM)**Plaintiff's EXHIBIT A****Of Joint Claim Construction and Prehearing Statement****Originally Proposed Terms for Construction**

Plaintiff's	Defendants'
1. infused	1. configured to pass testing mandated by UL 2079
2. starting density	2. configured to pass movement cycling and fire endurance testing mandated by UL 2079
3. after compression / when compressed	3. foam
4. after installation / when installed	4. core
5. withstanding exposure / withstand exposure	5. infused
6. maintain fire resistance	6. included in
7. pass testing mandated by UL 2079 / pass UL 2079 testing	7. put into
8. profile to facilitate compression and expansion	8. permeated in
9. angled around a corner	9. after installation / when installed
10. core	10. expansion joint system and infused foam are
	11. uncompressed / compressed
	12. about 130 kg/m ³ to about 150 kg/m ³
	13. fire retardant material / fire retardant
	14. capable of withstanding / ability to withstand
	15. a temperature of about 540°C. at about 5 minutes
	16. a temperature of about 540°C. or greater for about 5 minutes
	17. a temperature of about 1010°C at about two hours

Agreed Upon Terms and Proposed Construction

	Term / Phrase / Clause	Proposed Construction
1.	after installation / when installed	after placement between two substrates / when placed between two substrates
2.	angled around a corner	change in direction at an angle in either a horizontal plane, a vertical plane, or a combination thereof
3.	profile to facilitate compression and expansion	an outline of an object or structure which permits compression and expansion
4.	starting density	density (density = mass / volume) prior to being pressed into less volume
5.	compression	being pressed into less volume
6.	uncompressed	the absence of being pressed into less volume
7.	when compressed	when being pressed into less volume

Plaintiff's Support for Agreed Upon Proposed Construction

	Term (Asserted Claims)	Construction	Intrinsic Evidence / Extrinsic Evidence
Agreed upon Terms / Portions of Terms			
1. (Pl. #4; Df. #9)	after installation / when installed <u>Claims</u> <u>8,739,495 C1</u> II, I25, I33, I38, I41, I42 <u>9,528,262 B2</u> II, I13, I24, I33 <u>9,644,368 B1</u> II, I8, D13, I15 <u>9,670,666 B1</u> II <u>9,637,915 B1</u> II, I36	after placement between two substrates / when placed between two substrates	<u>Patents-in-suit:</u> 8,739,495C1 3:37-59, 4:24-39, 6:40-55, and FIGS. 1-3; 9,528,262B2 3:45-67, 4:36-52, 6:54 to 7:3, and FIGS. 1-3; 9,644,368B1 3:47 to 4:2, 4:36-52, 6:54 to 7:3, and FIGS. 1-3; 9,670,666B1 3:22-56, 4:32-50, 8:58 to 9:11, and FIGS. 1-5; and 9,637,915B1 2:47-62, 5:15-23, 6:57-64, 8:17-50, 11:45-65 and FIGS. 3, 6, and 8-12. <u>Prosecution History:</u> Patent Owner's Response to Petitions for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 63-66 (Exhibit K); PTO Decision to Institute Post- Grant Review of 9,528,262B2, dated April 9, 2018, pages 13-20 (Exhibit L); and

			Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 53-61 (Exhibit M).
2. (Pl. #9)	angled around a corner <u>9,637,915 B1</u> II, D9, D11, I36	change in direction at an angle in either a horizontal plane, a vertical plane, or a combination thereof	<u>Patents-in-suit:</u> 9,637,915B1 2:26-62, 3:57-66, 6:20-35, 6:57 to 7:11, FIGS. 1, and 5 to 7.
3. (Pl. #8)	profile to facilitate compression and expansion <u>Claims</u> <u>8,739,495 C1</u> II, I25, I38, I42	an outline of an object or structure which permits compression and expansion	<u>Patents-in-suit:</u> 8,739,495C1 5:30-34. 9,528,262B2 5:44-48. 9,644,368B1 5:44-48. 9,670,666B1 6:18-22. 9,637,915B1 5:64 to 6:3. <u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 1400, 633 (Exhibit Y); and Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 640, 288 (Exhibit Z).
4. (Pl. #2)	starting density <u>Claims</u> <u>8,739,495 C1</u> II, I25, I33, I38, I41, I42	density (density = mass / volume) prior to being pressed into less volume	<u>Patents-in-suit:</u> 8,739,495C1 4:51-56 and 6:40-46; 9,528,262B2 4:64 to 5:3, and 6:54-60; 9,644,368B1 4:64 to 5:3, and 6:54-60; 9,670,666B1 5:24-35 and 8:58-67; and 9,637,915B1 4:58 to 5:2, and 11:45-65.

5. (Part of Pl.# 3 & 8)	compression <u>Claims</u> <u>8,739,495 C1</u> I1, I25, I33, I38, I41, I42 <u>9,644,368 B1</u> D3, D7 <u>9,670,666 B1</u> I1, I26, I38, I42, D43, I52	being pressed into less volume	<u>Patents-in-suit:</u> 8,739,495C1 3:19-22, 37-59, 4:33-39, 6:40-55, and FIGS. 1-3; 9,528,262B2 3:26-28, 36-67, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,644,368B1 3:28-31, 3:47 to 4:2, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,670,666B1 3:22-56, 4:41-50, 8:58 to 9:11, and FIGS. 1-5; and 9,637,915B1 2:47-62, 5:15-23, 11:45-65 and FIGS. 3, 6, and 8-12. <u>Prosecution History:</u> Patent Owner's Response to Petitions for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 63-66 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 13-20 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 53-61 (Exhibit M) <u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, Copyright © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 379 (Exhibit N); and Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 156 (Exhibit O).
6. (Part of Df. #11)	uncompressed <u>Claims</u>	the absence of being pressed into less volume	<u>Patents-in-suit:</u> 8,739,495C1 3:19-22, 37-59, 4:33-39, 6:40-55, and FIGS. 1-3; 9,528,262B2 3:26-28, 36-67, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,644,368B1 3:28-31, 3:47 to 4:2, 4:46-52, 6:54 to 7:3, and FIGS. 1-

	<p><u>8,739,495 C1</u> I1, I25, I33, I38, I41, I42</p> <p><u>9,528,262 B2</u> D2, D14, D28, D37</p> <p><u>9,644,368 B1</u> D2, D9</p> <p><u>9,670,666 B1</u> D12, D32, D44</p> <p><u>9,637,915 B1</u> D17, D25, D35, D40</p>		<p>3; 9,670,666B1 3:22-56, 4:41-50, 8:58 to 9:11, and FIGS. 1-5; and 9,637,915B1 2:47-62, 5:15-23, 11:45-65 and FIGS. 3, 6, and 8-12.</p> <p><u>Prosecution History:</u> Patent Owner's Response to Petitions for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 63-66 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 13-20 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 53-61 (Exhibit M)</p> <p><u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, Copyright © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 379 (Exhibit N); and Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 156 (Exhibit O).</p>
7. (Part of Pl. #3, part of Df. #11)	<p>when compressed</p> <p><u>Claims</u></p> <p><u>9,670,666 B1</u> I1, I26, I38, I42, I52</p> <p>"compressed" <u>9,637,915 B1</u> I1, I26, I36</p>	when being pressed into less volume	<p><u>Patents-in-suit:</u> 8,739,495C1 3:19-22, 37-59, 4:33-39, 6:40-55, and FIGS. 1-3; 9,528,262B2 3:26-28, 36-67, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,644,368B1 3:28-31, 3:47 to 4:2, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,670,666B1 3:22-56, 4:41-50, 8:58 to 9:11, and FIGS. 1-5; and 9,637,915B1 2:47-62, 5:15-23, 11:45-65 and FIGS. 3, 6, and 8-12.</p> <p><u>Prosecution History:</u></p>

			<p>Patent Owner's Response to Petitions for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 63-66 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 13-20 (Exhibit L); and</p> <p>Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 53-61 (Exhibit M)</p> <p><u>Dictionaries:</u></p> <p>The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, Copyright © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 379 (Exhibit N); and</p> <p>Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 156 (Exhibit O).</p>
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Plaintiff's List of Disputed Terms and Proposed Construction

	List of Disputed Term / Phrase / Clause
1.	"core"
2.	"foam"
3.	"after compression"
4.	"capable of withstanding exposure" / "ability to withstand exposure"
5.	"pass UL2079 testing" / "pass testing mandated by UL2079"
6.	"maintain fire resistance"
7.	"configured to pass testing mandated by UL 2079" / "configured to pass movement cycling and fire endurance testing mandated by UL 2079"
8.	"expansion joint system and the infused foam are"
9.	"fire retardant material" / "fire retardant"
10.	"infused"
11.	"included in"
12.	"put into"
13.	"permeated in"
14.	"about 130 kg/m ³ to about 150 kg/m ³ "
15.	"a temperature of about 540°C at about 5 minutes"
16.	"a temperature of about 540°C or greater for about 5 minutes"
17.	"a temperature of about 1010°C at about two hours"

Plaintiff's Constructions for Disputed Terms

	<u>Disputed Term</u> <u>(Asserted Claims)</u>	<u>Plaintiff's Construction</u> <u>and Evidence</u>	<u>Defendant's</u> <u>Construction</u> <u>and Evidence</u>	<u>Court's</u> <u>Construction</u>
1. (Pl. #10, Df. #4)	core <u>Claims</u> 9,670,666 B1 I1; D2; D3; D5; D6; D7; D8; D12; D13; D15; D16; D17; D18; I26; D27; D28; D30; D31; D32; I38; D40; D41; I42; D43; D44; D45; D50; I52; D53; D54	material capable of compression and expansion to accommodate movement and to provide a recovery or return force ("back pressure") <u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u> <u>Patents-in-suit:</u> 9,670,666B1 1:24-34, 3:22-56, 4:9-14 and 41-64, 4:65 to 5:15, 9:19-27, and FIGS. 1 to 5; and		

	<u>9,637,915 B1</u> I1; D2; D3; D4; D6; D7; D10; D12; D13; D14; D15; D16; D17; D19; D23; D25; I26; D27; D28; D29; D30; D31; D34; D35; I36; D37; D38; D40	9,637,915B1 1:36-41, 2:26-62, 3:46-56, 3:41 to 4:49, and FIGS. 1 to 12.		
2. (Df. #3)	foam <u>Claims</u> <u>8,739,495 C1</u> I1, D2, D6, D9, D12, D13, D16, D19, D20, D24, I25, D26, D28, I33, D35, D37, I38, D39, D40, I41, I42, D43, D44 <u>9,528,262 B2</u> I1, D2, D7-D9, I13, D14, D16-D18, I24, D28-D31, I33, D37-D40 <u>9,644,368 B1</u> I1, D2, D3, D7, I8, D9, D10, D14, I15 <u>9,670,666 B1</u> D15, D16 <u>9,637,915 B1</u> D4-D6, D28	cellular material capable of compression and expansion to accommodate movement and to provide a recovery or return force ("back pressure") <u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u> <u>Patents-in-suit:</u> 8,739,495C1 1:24-43, 3:19-59, 3:60 to 4:11, 4:33-50, 6:62 to 7:10, and FIGS. 1 to 3; 9,528,262B2 1:29-48, 3:26-67, 4:1-5, 4:14-20, 4:46-64, 7:4-25, and FIGS. 1 to 3; 9,644,368B1 1:30-49, 3:28-60, 3:61 to 4:2, 4:3- 8, 4:16-21, 4:46-64, 7:4- 25, and FIGS. 1 to 3; 9,670,666B1 1:24-43, 3:22-56, 4:9-14 and 41-64, 4:65 to 5:15, 9:19-27, and FIGS. 1 to 5; and 9,637,915B1 1:36-41, 2:26-62, 3:46-56, 3:41 to 4:49, and FIGS. 1 to 12.		
3.	after compression	after being pressed into		

(Part of Pl. #3)	<p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1; I25; I33; I38; I41; I42</p> <p><u>9,644,368 B1</u> D3; D7</p> <p><u>9,670,666 B1</u> I1; I26; I38; I42; D43; I52</p>	<p>less volume</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 3:19-22, 37-59, 4:33-39, 6:40-55, and FIGS. 1-3; 9,528,262B2 3:26-28, 36-67, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,644,368B1 3:28-31, 3:47 to 4:2, 4:46-52, 6:54 to 7:3, and FIGS. 1-3; 9,670,666B1 3:22-56, 4:41-50, 8:58 to 9:11, and FIGS. 1-5; and 9,637,915B1 2:47-62, 5:15-23, 11:45-65 and FIGS. 3, 6, and 8-12.</p> <p><u>Prosecution History:</u> Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 63-66 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 13-20 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 53-61 (Exhibit M).</p> <p><u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, Copyright ©</p>		
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		2009, 2006, 2000 Houghton Mifflin Harcourt, p. 379. (Exhibit N); and Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 156. (Exhibit O).		
4. (Pl. #5, part of Df. #14)	<p>capable of withstanding exposure / ability to withstand exposure</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1; D21; D22; D23; I25; I33; I38; D39; D40; I41; I42; D43; D44</p> <p><u>9,528,262 B2</u> I1; D4; D5; D6; D11; D12; I13; D15; D20; D21; D22; D23; I24; D25; D26; D27; I33; D34; D35; D36; D42; D43</p> <p><u>9,644,368 B1</u> I1; D4; D5</p> <p><u>9,670,666 B1</u> I1; D21; D22; D23; D24; D25; I26; D34; D35; D36; D37; I38; D56; D57; D58; D59</p> <p><u>9,637,915 B1</u></p>	<p>capable of resisting or enduring exposure to meet or pass a requirement / ability to resist or endure exposure to meet or pass a requirement</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 6:40-55; 9,528,262B2 6:54 to 7:3; 9,644,368B1 6:54 to 7:3; 9,670,666B1 8:58 to 9:11; and 9,637,915B1 11:45-65.</p> <p><u>Prosecution History:</u> Reexam of related 8,813,450 B1 (90/013,511), October 23, 2015 Office Action, pages 3-6 (Exhibit P); Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-22, 29-33, 66-69, 69-72 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 32-43 (Exhibit L); and</p>		

	D20; D21; D22; D32; D33; D38	<p>Patent Owner’s Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 28-31, 61-64, and 68-72 (Exhibit M).</p> <p><u>Technical Documentation:</u> UL 2079 (2008) standard, titled “Tests for Fire Resistance of Building Joint Systems,” 4th edition, with revisions thru June 30, 2008, Sections 16.5 and 23 (Exhibit Q).</p> <p><u>Dictionaries:</u> Merriam-Webster’s Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 927, (Exhibit R); and The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, Copyright © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 1976 (Exhibit S).</p> <p><u>Expert:</u> Overview of fire endurance testing and what it means to “withstand exposure” to time-temperature curve of UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W)</p>		
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<p>5. (Pl. #7, part of Df. #1)</p>	<p>pass UL 2079 testing / pass testing mandated by UL 2079</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1; I25; I33; I38; I41; I42</p> <p><u>9,528,262 B2</u> I1; D4; D5; D6; D11; D12; I13; D15; D20; D21; D22; D23; I24; D25; D26; D27; I33; D34; D35; D36; D42; D43</p> <p><u>9,644,368 B1</u> I1; D4; D5; I8; D11; D12; I15; D16; D17</p> <p><u>9,670,666 B1</u> I1; D21; D22; D23; D24; D25; I26; D34; D35; D36; D37; I38; I42; D46; D47; D48; D49; D50; I52; D56; D57; D58; D59</p> <p><u>9,637,915 B1</u> I1; I26; I36</p>	<p>perform in accordance with UL2079, which includes cycling through an intended range of movement and after, meeting conditions for acceptance of a fire endurance test</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 6:40-55; 9,528,262B2 6:54 to 7:3; 9,644,368B1 6:54 to 7:3; 9,670,666B1 8:58 to 9:11; and 9,637,915B1 11:45-65.</p> <p><u>Prosecution History:</u> Reexam of related 8,813,450 B1 (90/013,511), October 23, 2015 Office Action, pages 3-6 (Exhibit P); Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-22, 34-42, and 43-57 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 20-28 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 31-35, 36-47, and 64-68 (Exhibit M).</p> <p><u>Technical Documentation:</u> UL 2079 (2008), Sections</p>		
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		<p>9, 11, 16.5 and 23. (Exhibit Q).</p> <p><u>Patent Documents:</u> 9,803,357B1 3:5-15, 3:65 to 4:2, 18:5-15 (Exhibit D); and US 2018/0148922A1 [0044], [0047] (Exhibit V).</p> <p><u>Experts:</u> Overview of fire endurance testing and what it means to perform acceptability under UL 2079, and “to pass” UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W); and Dale R. Wheeler, P.E. of Systech Fire Protection LLC (C.V. Exhibit X); Inventors – Bill Witherspoon and Lester Hensley, both of EMSEAL.</p>		
6. (Pl. #6)	<p>maintain fire resistance</p> <p><u>Claims</u></p> <p><u>9,644,368 B1</u> I8; D11; D12; I15; D16; D17</p> <p><u>9,670,666 B1</u> I42; D46; D47; D48; D49; I52</p>	<p>keep / continue inhibiting the spread of fire and heat</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 3:17-18, 6:40-55; 9,528,262B2 3:24-25, 6:54 to 7:3; 9,644,368B1 3:26-27, 6:54 to 7:3; 9,670,666B1 3:20-21, 8:58 to 9:11; and 9,637,915B1 11:45-65.</p>		

		<p><u>Prosecution History:</u> Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 61-64, 68-72, and 72-74 (Exhibit M).</p> <p><u>Technical Documentation:</u> UL 2079 (2008), Sections 11, 16.5 and 23. (Exhibit Q).</p> <p><u>Dictionaries:</u> Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 490 (Exhibit T); and The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, Copyright © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 1055 (Exhibit U).</p> <p><u>Expert:</u> Overview of fire endurance testing and what it means to perform acceptability under UL 2079, and "to pass" UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W).</p>		
7.	configured to pass testing mandated by UL 2079 /	made to perform in accordance with UL2079, which includes cycling		

(Part of Pl. #7, Df. #1 and #2)	<p>configured to pass movement cycling and fire endurance testing mandated by UL 2079</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1; I25; I33; I38; I41; I42</p> <p><u>9,528,262 B2</u> I1; D4; D5; D6; D11; D12; I13; D15; D20; D21; D22; D23; I24; D25; D26; D27; I33; D34; D35; D36; D42; D43</p> <p><u>9,644,368 B1</u> I1; D4; D5; I8; D11; D12; I15; D16; D17</p> <p><u>9,670,666 B1</u> I1; D21; D22; D23; D24; D25; I26; D34; D35; D36; D37; I38; I42; D46; D47; D48; D49; D50; I52; D56; D57; D58; D59</p> <p><u>9,637,915 B1</u> I1; I26;</p>	<p>through an intended range of movement and after, meeting conditions for acceptance of a fire endurance test</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 6:40-55; 9,528,262B2 6:54 to 7:3; 9,644,368B1 6:54 to 7:3; 9,670,666B1 8:58 to 9:11; and 9,637,915B1 11:45-65.</p> <p><u>Prosecution History:</u> Reexam of related 8,813,450 B1 (90/013,511), October 23, 2015 Office Action, pages 3-6 (Exhibit P); Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-22, 34-42, and 43-57 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 20-28 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 31-35, 36-47, and 64-68 (Exhibit M).</p> <p><u>Technical Documentation:</u> UL 2079 (2008), Sections 9, 11, 16.5 and 23 (Exhibit</p>		
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		<p>Q).</p> <p><u>Patent Documents:</u> 9,803,357B1 3:5-15, 3:65 to 4:2, 18:5-15 (Exhibit D); and US 2018/0148922A1 [0044], [0047] (Exhibit V).</p> <p><u>Experts:</u> Overview of fire endurance testing and what it means to perform acceptability under UL 2079, and “to pass” UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W); and Dale R. Wheeler, P.E. of Systech Fire Protection LLC (C.V. Exhibit X); Inventors – Bill Witherspoon and Lester Hensley, both of EMSEAL.</p>		
8. (Part of Df. #10)	<p>expansion joint system and the infused foam are</p> <p><u>Claims</u></p> <p>8,739,495 C1 I1, I25, I33, I38, I41, I42</p>	<p>expansion joint system including infused foam are,</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 1:24-43, 3:19-59, 3:60 to 4:11, 4:33-50, 6:40-55, 6:62 to 7:10, and FIGS. 1 to 3; 9,528,262B2 1:29-48, 3:26-67, 4:1-5, 4:14-20, 4:46-64, 6:54 to 7:3, 7:4-</p>		

		<p>25, and FIGS. 1 to 3; 9,644,368B1 1:30-49, 3:28-60, 3:61 to 4:2, 4:3-8, 4:16-21, 4:46-64, 6:54 to 7:3, 7:4-25, and FIGS. 1 to 3; 9,670,666B1 1:24-43, 3:22-56, 4:9-14 and 41-64, 4:65 to 5:15, 8:58 to 9:11, 9:19-27, and FIGS. 1 to 5; and 9,637,915B1 1:36-41, 2:26-62, 3:46-56, 3:41 to 4:49, 11:45-65, and FIGS. 1 to 12.</p> <p><u>Prosecution History:</u> Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-20, 43-57, 61-63 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 20-28 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 31-35, 36-47 and 64-68 (Exhibit M).</p>		
9. (Df. #13)	<p>fire retardant material / fire retardant</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1, D9, D16, D19, D20, D24, I25,</p>	<p>a material that inhibits the spread of fire</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 3:17-18, 4:35-39, 4:57-67;</p>		

	<p>D26, I33, D35, D37, I38, I41, I42</p> <p><u>9,528,262 B2</u> I1, D7-D9, I13, D16-D18, I24, D29-D31, I33, D38-D40</p> <p><u>9,644,368 B1</u> I1, I8, D9, D10, D14, I15</p> <p><u>9,670,666</u> I1, D2, D3, D6, D18, I26, D27, D28, D31, I38, D40, D41, I42, D43, D44, D45, D50, I52, D53, D54</p> <p><u>9,637,915 B1</u> I1, D2, D14, D15, D16, D23, D25, I26, D30, D31, D34, D35, I36, D38, D40</p>	<p>9,528,262B2 3:24-25, 4:48-52, 5:4-14; 9,644,368B1 3:26-27, 4:48-52, 5:4-14; 9,670,666B1 3:20-21, 4:43-50, 5:16-23, 5:36-48; and 9,637,915B1 4:5-7, 4:50- 57, 5:2-15.</p>		
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10. (Pl. #1, Df. #5)	<p>infused</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1; D9; D16; D19; D20; D24; I25; D26; I33; D35; D37; I38; D39; D40; I41; I42; D43; D44</p> <p><u>9,644,368 B1</u> I1; D3; D7</p> <p><u>9,670,666 B1</u> I1; D2; D5; D6; D18; I26; D27; D30; D31; I38</p> <p><u>9,637,915 B1</u> I1; D2; D14; D16; D23; D25; I26; D29; D30; D34; D35; I36; D38; D40</p>	<p>put into, impregnate</p> <p><u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 4:33-39 and 51-56, and FIGS. 1, 1A; 9,528,262B2 4:46-52 and 4:64 to 5:3, and FIGS. 1, 1A; 9,644,368B1 4:46-52 and 4:64 to 5:3, and FIGS. 1, 1A; 9,670,666B1 4:41-50 and 5:24-35, and FIGS. 1, 1A; and 9,637,915B1 4:5-20, 50- 54, and 4:58 to 5:5, 10:26- 35, and FIGS. 2, 2A</p> <p><u>Translation issue due to</u> <u>inference in foreign</u> <u>language:</u> Email correspondence from L. Hensley to D. O'Hayer et al., dated 02 Nov 2004 including Nov 2004 SeismicColorseal TechData Sheet (Exhibit F); 2005 Powerpoint Presentation to Potential Chinese Customers and translation attachment (Exhibit G); and Email correspondence from B. Moussallieh (EMSEAL International Project Manager) and Translator H. Chicoine, dated May 26, 2015 (Exhibit H).</p>		
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		Inventor –Lester Hensley, of EMSEAL.		
11. (Df. #6)	included in <u>Claims</u> <u>9,528,262 B2</u> I1, D7, D8, D9, I13, D16, D17, D18, I24, D29, D30, D31, I33, D38, D39, D40	having been taken into or placed into <u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u> <u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618- 70172-8, © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 887 (Exhibit AA); and Merriam-Webster’s Dictionary And Thesaurus, © 2007, ISBN- 13: 978-0-87779-640-4, p. 414 (Exhibit BB).		
12. (Df. #7)	put into <u>Claims</u> <u>9,644,368 B1</u> I8, I15	placed into <u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u> <u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618- 70172-8, © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 1425 (Exhibit CC); and Merriam-Webster’s Dictionary And Thesaurus, © 2007, ISBN- 13: 978-0-87779-640-4, p. 652 (Exhibit DD).		

13. (Df. #8)	<p>permeated in</p> <p><u>Claims</u></p> <p><u>9,670,666 B1</u> I42, I52</p>	<p>put into, impregnate</p> <p><u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u></p> <p><u>Dictionaries:</u> The American Heritage® Dictionary of the English Language, Fourth Edition, ISBN-13: 978-0-618-70172-8, © 2009, 2006, 2000 Houghton Mifflin Harcourt, p. 1309 (Exhibit EE); and Merriam-Webster's Dictionary And Thesaurus, © 2007, ISBN-13: 978-0-87779-640-4, p. 599 (Exhibit FF).</p>		
14. (Df. #12)	<p>about 130 kg/m³ to about 150 kg/m³</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u> I1, I25, I33, I38, I41, I42</p> <p><u>9,528,262 B2</u> D2, D14, D28, D37</p> <p><u>9,644,368 B1</u> D2, D9</p> <p><u>9,670,666 B1</u> D44</p>	<p>approximately 130 kg/m³ to approximately 150 kg/m³</p> <p><u>Intrinsic Evidence /</u> <u>Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 4:51-56, 6:43-45; 9,528,262B2 4:64 to 5:3, 6:57-59; 9,644,368B1 4:64 to 5:3, 6:57-59; 9,670,666B1 5:24-35, 8:62-65; and 9,637,915B1 4:58 to 5:2, 11:48-52.</p> <p><u>Other Authority:</u> Patent Claim Construction in the Federal Circuit, 2018 Edition, pages 1357-1360 (Exhibit HH).</p>		

<p>15. (Df. #15)</p>	<p>a temperature of about 540°C at about 5 minutes</p> <p><u>Claims</u></p> <p><u>9,528,262 B2</u> I1, I24, I33</p> <p><u>9,644,368 B1</u> I1, I8, I15</p> <p><u>9,670,666 B1</u> I1, I26, I38, I42, I52</p>	<p>a temperature of approximately 540°C at approximately 5 minutes</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u> 8,739,495C1 6:40-55; 9,528,262B2 6:54 to 7:3; 9,644,368B1 6:54 to 7:3; 9,670,666B1 8:58 to 9:11; and 9,637,915B1 11:45-65.</p> <p><u>Technical Documents:</u> UL 2079 (2008), Sections 11, 16.5 and 23 (Exhibit Q).</p> <p><u>Prosecution History:</u> Schul's Request for Reexam of 8,739,495B1, pages 8-9, 60 (Exhibit GG); Reexam of related 8,813,450 B1 (90/013,511), October 23, 2015 Office Action, pages 3-6 (Exhibit P); Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-22, 29-33, 66-69, 69-72 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 32-43 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 28-31, 61-64, and</p>		
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		<p>68-72 (Exhibit M).</p> <p><u>Patent Documents:</u> 9,803,357B1 3:5-15, 3:65 to 4:2, 18:5-15 (Exhibit D); and US 2018/0148922A1 [0044], [0047] (Exhibit V).</p> <p><u>Other Authority:</u> <i>Patent Claim Construction in the Federal Circuit</i>, 2018 Edition, pages 1357-1360 (Exhibit HH).</p> <p><u>Experts:</u> Overview of fire endurance testing and what it means to perform acceptability under UL 2079, and “to pass” UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W); and Dale R. Wheeler, P.E. of Systech Fire Protection LLC (C.V. Exhibit X); Inventors – Bill Witherspoon and Lester Hensley, both of EMSEAL.</p>		
16. (Df. #16)	<p>a temperature of about 540°C or greater for about 5 minutes</p> <p><u>Claims</u></p> <p><u>8,739,495 C1</u></p>	<p>a temperature of approximately 540°C or greater for approximately 5 minutes</p> <p><u>Intrinsic Evidence / Extrinsic Evidence</u></p> <p><u>Patents-in-suit:</u></p>		

	<p>I1, I25, I33, I38, I41, I42</p>	<p>8,739,495C1 6:40-55; 9,528,262B2 6:54 to 7:3; 9,644,368B1 6:54 to 7:3; 9,670,666B1 8:58 to 9:11; and 9,637,915B1 11:45-65.</p> <p><u>Technical Documents:</u> UL 2079 (2008), Sections 11, 16.5 and 23 (Exhibit Q).</p> <p><u>Prosecution History:</u> Schul's Request for Reexam of 8,739,495B1, pages 8-9, 60 (Exhibit GG); Reexam of related 8,813,450 B1 (90/013,511), October 23, 2015 Office Action, pages 3-6 (Exhibit P); Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-22, 29-33, 66-69, 69-72 (Exhibit K); PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 32-43 (Exhibit L); and Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 28-31, 61-64, and 68-72 (Exhibit M).</p> <p><u>Patent Documents:</u> 9,803,357B1 3:5-15, 3:65 to 4:2, 18:5-15 (Exhibit D); and US 2018/0148922A1 [0044], [0047] (Exhibit</p>		
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		<p>V).</p> <p><u>Other Authority:</u> <i>Patent Claim Construction in the Federal Circuit</i>, 2018 Edition, pages 1357-1360 (Exhibit HH).</p> <p><u>Experts:</u> Overview of fire endurance testing and what it means to perform acceptability under UL 2079, and “to pass” UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W); and Dale R. Wheeler, P.E. of Systech Fire Protection LLC (C.V. Exhibit X); Inventors – Bill Witherspoon and Lester Hensley, both of EMSEAL.</p>		
17. (Df. #17)	<p>a temperature of about 1010°C at about two hours</p> <p><u>Claims</u></p> <p><u>9,528,262 B2</u> D5, I13, D21, D26, D35</p> <p><u>9,644,368 B1</u> D5, D12, D17</p> <p><u>9,670,666 B1</u> D21, D35, D47, D57</p> <p><u>9,637,915 B1</u></p>	<p>a temperature of approximately 1010°C at approximately two hours</p> <p><u>Patents-in-suit:</u> 8,739,495C1 6:40-55; 9,528,262B2 6:54 to 7:3; 9,644,368B1 6:54 to 7:3; 9,670,666B1 8:58 to 9:11; and 9,637,915B1 11:45-65.</p> <p><u>Technical Documents:</u> UL 2079 (2008), Sections 11, 16.5 and 23 (Exhibit Q).</p> <p><u>Prosecution History:</u></p>		

	D21, D32	<p>Schul's Request for Reexam of 8,739,495B1, pages 8-9, 60 (Exhibit GG);</p> <p>Reexam of related 8,813,450 B1 (90/013,511), October 23, 2015 Office Action, pages 3-6 (Exhibit P);</p> <p>Patent Owner's Response to Petition for Post-Grant Review of 9,528,262B2, dated January 10, 2018, pages 15-22, 29-33, 66-69, 69-72 (Exhibit K);</p> <p>PTO Decision to Institute Post-Grant Review of 9,528,262B2, dated April 9, 2018, pages 32-43 (Exhibit L); and</p> <p>Patent Owner's Response to Petition for Post-Grant Review of 9,644,368B1, dated May 23, 2018, pages 16-22, 28-31, 61-64, and 68-72 (Exhibit M).</p> <p><u>Patent Documents:</u></p> <p>9,803,357B1 3:5-15, 3:65 to 4:2, 18:5-15 (Exhibit D); and</p> <p>US 2018/0148922A1 [0044], [0047] (Exhibit V).</p> <p><u>Other Authority:</u></p> <p><i>Patent Claim Construction in the Federal Circuit</i>, 2018 Edition, pages 1357-1360 (Exhibit HH).</p> <p><u>Experts:</u></p> <p>Overview of fire endurance testing and what it means to perform acceptability under UL</p>		
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		2079, and “to pass” UL 2079 Industry Experts – Dr. Vytenis Babrauskas, Ph.D. of Fire Science and Technology Inc. (C.V. Exhibit W); and Dale R. Wheeler, P.E. of Systech Fire Protection LLC (C.V. Exhibit X); Inventors – Bill Witherspoon and Lester Hensley, both of EMSEAL.		
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